

Release notes for ENDF/B Development e-087_Fr_000
evaluation

ENDF
B-VII.dev

October 13, 2016

- fudge-4.0 Warnings:

1. Mislabelled emitted particle
Reading ENDF file: ../e-087_Fr_000.endf (Error # 0): ZAP messed up

WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0
2. FIXME: Generic fudge unimplemented message
reaction label 1: e- + Fr + gamma [bremsstrahlung] / Product: e- (Error # 0): Generic unimp (c)

WARNING: Checking not yet implemented for energyLoss type data
3. FIXME: Generic fudge unimplemented message
reaction label 2: e- + Fr [excitation] / Product: e- (Error # 0): Generic unimp (c)

WARNING: Checking not yet implemented for energyLoss type data

- fudge-4.0 Errors:

1. Calculated and tabulated thresholds don't agree
reaction label 0: e- + Fr [large angle Coulomb scattering] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!
2. Calculated and tabulated thresholds don't agree
reaction label 1: e- + Fr + gamma [bremsstrahlung] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!
3. Calculated and tabulated thresholds don't agree
reaction label 2: e- + Fr [excitation] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!
4. Calculated and tabulated thresholds don't agree
reaction label 3: e- + e- + Fr1s1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 101520. eV!
5. Calculated and tabulated thresholds don't agree
reaction label 4: e- + e- + Fr2s1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 18630. eV!
6. Calculated and tabulated thresholds don't agree
reaction label 5: e- + e- + Fr2p1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 17971. eV!
7. Calculated and tabulated thresholds don't agree
reaction label 6: e- + e- + Fr2p3/2 / Cross section: (Error # 0): Threshold mismatch

- WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 15034. eV!
8. Calculated and tabulated thresholds don't agree
reaction label 7: $e^- + e^- + Fr3s1/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 4619.1 eV!

 9. Calculated and tabulated thresholds don't agree
reaction label 8: $e^- + e^- + Fr3p1/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 4312.5 eV!

 10. Calculated and tabulated thresholds don't agree
reaction label 9: $e^- + e^- + Fr3p3/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 3644.5 eV!

 11. Calculated and tabulated thresholds don't agree
reaction label 10: $e^- + e^- + Fr3d3/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 3138.9 eV!

 12. Calculated and tabulated thresholds don't agree
reaction label 11: $e^- + e^- + Fr3d5/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 2999.2 eV!

 13. Calculated and tabulated thresholds don't agree
reaction label 12: $e^- + e^- + Fr4s1/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1130.3 eV!

 14. Calculated and tabulated thresholds don't agree
reaction label 13: $e^- + e^- + Fr4p1/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 992.6900000000001 eV!

 15. Calculated and tabulated thresholds don't agree
reaction label 14: $e^- + e^- + Fr4p3/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 822.8 eV!

 16. Calculated and tabulated thresholds don't agree
reaction label 15: $e^- + e^- + Fr4d3/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 597.6 eV!

 17. Calculated and tabulated thresholds don't agree
reaction label 16: $e^- + e^- + Fr4d5/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 565.95 eV!

 18. Calculated and tabulated thresholds don't agree
reaction label 17: $e^- + e^- + Fr4f5/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 269.95 eV!

19. Calculated and tabulated thresholds don't agree
reaction label 18: $e^- + e^- + \text{Fr}4f7/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 262.07 eV!

20. Calculated and tabulated thresholds don't agree
reaction label 19: $e^- + e^- + \text{Fr}5s1/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 232.34 eV!

21. Calculated and tabulated thresholds don't agree
reaction label 20: $e^- + e^- + \text{Fr}5p1/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 181. eV!

22. Calculated and tabulated thresholds don't agree
reaction label 21: $e^- + e^- + \text{Fr}5p3/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 143.91 eV!

23. Calculated and tabulated thresholds don't agree
reaction label 22: $e^- + e^- + \text{Fr}5d3/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 68.73 eV!

24. Calculated and tabulated thresholds don't agree
reaction label 23: $e^- + e^- + \text{Fr}5d5/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 63.52 eV!

25. Calculated and tabulated thresholds don't agree
reaction label 24: $e^- + e^- + \text{Fr}6s1/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 32.64 eV!

26. Calculated and tabulated thresholds don't agree
reaction label 25: $e^- + e^- + \text{Fr}6p1/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 19.28 eV!

27. Calculated and tabulated thresholds don't agree
reaction label 26: $e^- + e^- + \text{Fr}6p3/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 14.14 eV!

28. Calculated and tabulated thresholds don't agree
reaction label 27: $e^- + e^- + \text{Fr}7s1/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 3.8 eV!

- **xsectplotter** Warnings:

1. Mislabeled emitted particle
Error: ZAP messed up

```
stderr while processing crossSection
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      WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0  
... [4 more lines]
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